

REMARKS

In response to the Office Action dated September 1, 2005, Applicant respectfully requests reconsideration based on the above claim amendment and the following remarks. Applicant respectfully submits that the claims as presented are in condition for allowance.

Claims 1, 4-5, 8-9, and 11-12 have been amended, leaving Claims 1-12 for consideration upon the entry of the amendments. Support for the amendment can be found in the entire specification. No new matter has been added by the amendments.

Claim Objections

Claims 11-12 are objected to because they are generally narrative and indefinite, failing to conform with current U.S. practice. Claims 11 and 12 have been amended to conform with current U.S. practice.

The Examiner has stated that he or she will examine Claim 4 as if the limitation read “gain slope compensation optical filter”. Applicant agrees with the Examiner, and has amended the limitation “gain-slope compensation optical fiber”, in Claim 4, to recite the limitation “gain-slope compensation optical filter”.

Claim Rejections under 35 U.S.C. 102

Claims 1-5 and 11-12 stand rejected under 35 U.S.C. 102(e) as being anticipated by Hellman, U.S. 2003/0185513 (hereinafter “Hellman”). Applicant respectfully traverses the rejections.

To anticipate a claim under 35 U.S.C. § 102, a single source must contain all of the elements of the claim. *Lewmar Marine Inc. v. Barient, Inc.*, 827 F.2d 744, 747, 3 U.S.P.Q.2d 1766, 1768 (Fed. Cir. 1987), *cert. denied*, 484 U.S. 1007 (1988). Hellman however, fails to disclose all of the elements of Claim 1.

Claim 1 recites an optical module comprises an inlet side optical fiber, an optical filter optically connected to said inlet side optical fiber, and an outlet side optical fiber optically connected to said optical filter, wherein, said optical filter comprises a gain-slope compensation optical filter for flattening a gain slope ($dG/d\lambda$, where G:gain, λ :wavelength), generated by the variation of input signals, of an optical amplifier connected to said inlet side optical fiber or said outlet side optical fiber.

In contrast, the paragraph [0029], page 2 of Hellman teaches that filter 15b is preferably a gain-flattening filter (GFF) similar to the type of filter commonly used in combination with an optical amplifier. Hellman does not disclose or teach the filter for flattening a gain slope. Therefore, Hellman fails to teach or suggest the gain slope compensation optical filter as recited in Claim 1.

The Examiner however, has stated on page 3 of the Office Action that the claim language “to flatten a gain slope of a gain of an optical amplifier” is identified to be a functional limitation, and the function limitation can be performed by the prior art structure. Applicant respectfully disagrees with the Examiner.

The claimed invention has the gain slope compensation optical filter to suppress gain-slope and to enable drastic expansion of available wavelength band. (See page 7, lines 9-12 of the specification) Thus, according to the claimed invention, the optical module is used for WDM or FDM. In contrast, Hellman is directed to an optical packaging design for optical filters, isolators, and the like. (See the paragraph [0002] of Col. 1 of Hellman) Therefore, Hellman does not disclose or teach the function for flattening a gain slope ($dG/d\lambda$, where G:gain, λ :wavelength) generated by the variation of input signals, as well as failing to teach the gain slope compensation optical filter.

Accordingly, Hellman neither anticipates nor renders Claim 1 obvious because it fails to disclose or teach the element “said optical filter comprises a gain-slope compensation optical filter for flattening a gain slope ($dG/d\lambda$, where G:gain, λ :wavelength), generated by the variation of input signals, of an optical amplifier connected to said inlet side optical fiber or said outlet side optical fiber”, as recited in Claim 1. Claims 2-5 depend from Claim 1, and thus are believed to be allowable due to their dependency.

Since it contains similar features, Claim 11 is patentable over Hellman. Claim 12 depends from Claim 11, and thus is believed to be allowable due to its dependency.

Claim Rejections under 35 U.S.C. 103

Claims 6-7 and 10 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Hellman in view of Ghera, U.S. 6,611,641 (hereinafter “Ghera”). Applicant respectfully traverses the rejections.

For an obviousness rejection to be proper, the Examiner must meet the burden of establishing that all elements of the invention are disclosed in the prior art; and that the prior art relied upon, coupled with knowledge generally available in the art at the time of the invention, must contain some suggestion or incentive that would have motivated the skilled artisan to modify a reference or combined references. *In re Fine*, 5 U.S.P.Q.2d 1596, 1598 (Fed. Cir. 1988); *In Re Wilson*, 165 U.S.P.Q. 494, 496 (C.C.P.A. 1970).

Ghera fails to teach or suggest the element “said optical filter comprises a gain-slope compensation optical filter for flattening a gain slope ($dG/d\lambda$, where G:gain, λ :wavelength), generated by the variation of input signals, of an optical amplifier connected to said inlet side optical fiber or said outlet side optical fiber”, as recited in Claim 1, from which Claims 6-7 depend. Therefore, Hellman in view of Ghera does not render Claim 1 obvious because it fails to teach all elements of Claim 1. Claims 6-7 are believed to be allowable due to their dependency.

Claims 8-9 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Hellman in view of Payne, U.S. 5,260, 823 (hereinafter “Payne”). Applicant respectfully traverses the rejections.

Payne fails to teach or suggest the element “said optical filter comprises a gain-slope compensation optical filter for flattening a gain slope ($dG/d\lambda$, where G:gain, λ :wavelength), generated by the variation of input signals, of an optical amplifier connected to said inlet side optical fiber or said outlet side optical fiber”, as recited in Claim 1, from which Claims 8-9 depend. Therefore, Hellman in view of Payne does not render Claim 1 obvious because it fails to teach all elements of Claim 1. Claims 8-9 are believed to be allowable due to their dependency.

Drawings

The drawings are objected to because the lines are uneven and difficult to read. Applicant respectfully submits the replacement drawings in compliance with 37 CFR 1.121(d).

Conclusion

In view of the foregoing, it is respectfully submitted that the instant application is in condition for allowance. Accordingly, it is respectfully requested that this application be allowed and a Notice of Allowance issued. If the Examiner believes that a telephone conference with Applicant's attorney would be advantageous to the disposition of this case, the Examiner is cordially requested to telephone the undersigned.

In the event the Commissioner of Patents and Trademarks deems additional fees to be due in connection with this application, Applicant's attorney hereby authorizes that such fee be charged to Deposit Account No. 06-1130.

Respectfully submitted,

By: 

Soonja Bae

Limited Recognition No.: L0017

CANTOR COLBURN LLP

55 Griffin Road South

Bloomfield, CT 06002

Telephone (860) 286-2929

Facsimile (860) 286-0115

Customer No. 23413

Date: January 3, 2006